

The intron sequences between exons 2 - 3 and exons 18 - 19 are missing (introns: small letters, exons: capital letters). Small letters in the first exon indicate nucleotides that have not been unambiguously determined.

Exon 1

1 CGGGTGAATC CCGGCGCCGC GCCCCGGACC CGCAGCTCCC TGCACCTCTC
51 CCTCCCAGCC GCTTTAACAC CCACACCCCA CAGTCTCTCC CACG~~s~~CCGCG
101 CCTTGGCGGC CCCACTGAAT CCCTACGCGG GGCCCAGCGG TACCGGGAGA
151 CCGGGCTAGC CTATGGGAGC GCCCAGATAA CGCGGGTTGG GGGCGCCCCGC
201 GCCCCCATCC CCGCCAGCA **T** GACTCGATCG CGCCCCCTCA GAGAGCTGCC
251 CCCGAGTTAC ACACCCCCAG CTCGAACCGC AGCACCCAG gtgagtagag
301 ggggagctgg aagaaggaag agagcggagc caggtctgtc actcgggcct
351 ctgcaagggtt tgtatgtct tgaagtgccg agtgtcatta gatgtctgaa
401 ggcaagttag agccagcacc gcaagcaagt tgtcggtgtg tgtcggtgtg
451 tctgtgccgg tgtctcctca tcgtctggcc agtgagaatg aatgtctgtg
501 ggttcacctc tgtgtccacc cgacgacagg tgtgtgtaca tatgtatcct
551 gctctcagaa aatgggccta tgccgcccggg cgccgtgact cacgcctgta
601 atcccaacac tgggaggctg aggcaaggcag attacctgag gtcaggagtt
651 cgagaccagc caggccaaca tggggaaact ctgtctctac taaaaataaaa
701 aattagcagg gcgtggtggc gggcgctgt agtcccaact actcgaggagg
751 ctgagggcagg agaatctctt gaacctggga ggcggaggtt gcagtcaagc
801 cgagatcaca ccactgcact ccagccaggg caacagagcg agatgcgtct
851 caaaaaaaaaa aaaaaaaaaa aaaaggagag aaaacaaaaa gaaaagaaaag
901 gaaaataggc ctatgccttc ctcaggtgtg tgctggggat ggtgggtgtt
951 acatcttcca agtctggcc tggatgttgc ttgggtgtcc ctgtcccaca
1001 tccagaaatc aagaagcgag ggctggcag cagatataca gggtgagaag

Fig. 1

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1051 ggaaggattt catgcattgt tacagtgatg cctggctgac ccttctcttt
 EXON 2
 1101 ccatcccagA TCCTAGCTGG GAGCCTGAAG GCTCCACTCT GGCTTCGTGC
 1151 TTACTTCCAG GGCCCTGCTCT TCTCTCTGGG ATGCAGGGATC CAGAGACATT
 1201 GTGGCAAAGT GCTCTTTCTG GGACTGTTGG CCTTTGGGGC CCTGGCATT
 1251 GGTCTCCGCA TGGCCATTAT TGAGACAAAC TTGGAACAGC TCTGGGTAGA
 1301 AGTGGGCAGC CGGGTGAGCC AGGAGCTGCA TTACACCAAG GAGAAGCTGG
 1351 GGGAGGAGGC TGCATACACC TCTCAGATGC TGATACAGAC CGCACGCCAG
 1401 GAGGGAGAGA ACATCCTCAC ACCCGAAGCA CTTGGCTTCC ACCTCCAGGC
 1451 AGCCCTCACT GCCAGTAAAG TCCAAGTATC ACTCTATGGG AAG.....
 1501
 1551 tgagtctggc tgagccccctg agcagctggg ggcgaggcgt gctgtggggg
 1601 ttctggagtg ggaatccccct tcttctgctg atctcctatg cccctggcta
 EXON 4
 1651 ttgcagTCCT GGGATTTGAA CAAAATCTGC TACAAGTCAG GAGTTCCCCCT
 1701 TATTGAAAAT GGAATGATTG AGCGGgtaaag tgcctgaga gggagtagag
 1751 gcagaacttt ttctgttagcg tgggaggact cagagaccga gcaagccccca
 1801 cagcctgcaa tctgccccct taaaactaag gagggggatt gcagagggca
 1851 tcctacaaag gttgtggggc aggactgacg tggccgggg tatccctggc
 EXON 5
 1901 agATGATTGA GAAGCTGTTT CCGTGGCGTGA TCCTCACCCCC CCTCGACTGC
 1951 TTCTGGGAGG GAGCCAAACT CCAAGGGGGC TCCGCCTACC TGCCgtgagt
 2001 gccactcctg gggccctgct tcattctcccg ctggggactc tcccaagcaga
 2051 aaggaggggt ctggggatg aggatgatca aaaccttacc aaggtcctaa
 2101 ttacctccca ggcaggaac agagagcatg ggcttcccca aggctctctc
 2151 cacatcctcc ttctctttcc ctctcaagga aggaagaccc gacttattta
 2201 cacaaaacta aacacaaaaga tctgtaaagat ctgagcaaag gagaaaaaaga
 2251 tccccacaaa gaggcttgc tggggaaat taccttaggtg tttgctaaagc
 2301 cattgcccaag gccagaaaaga aaacctgcta caggcatgtg cctgtctggtt
 2351 gtatattaga accaaggcaca cagcttggta aggaactcag tggggccttt

Fig. 1 (cont.)

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2401 ctggccctt tctatgtatt aggttaaccct gccctgatat tcgtctcagc
2451 cccttgtact cttctacagc tcactgttagc accctggtgg gccccatgcag
2501 cctggcagtt ctgagaagct gaggcttgca caccctccat atggaaggac
2551 aaatcggcag ataagaggag ggtggggtagc agcatggcgc cccagcagca
2601 gtttggagcc tgggttttcg tccctgaccc tcaccaacta taggctttc
EXON 6
2651 cctcagCGGC CGCCCGGATA TCCAGTGGAC CAACCTGGAT CCAGAGCAGC
2701 TGCTGGAGGA GCTGGGTCCC TTTGCCTCCC TTGAGGGCTT CCGGGAGCTG
2751 CTAGACAAAGG CACAGGTGGG CCAGGCCTAC GTGGGGCGGC CCTGTCTGCA
2801 CCCTGATGAC CTCCACTGCC CACCTAGTGC CCCCCAACCAT CACAGCAGGC
2851 AGgtgggttc caaccaggtc tgccaggaa aggctgtttt cttcccttt
2901 cccttcctca tactcctgtg ttctggggaa gctgactgct ctgtgcctg
2951 accccccact tcctggccat tattaccctg ctcccacagt gccaggcccc
3001 caatgttcca ttcccattca gttatcctac ggagccctca agtggtatat
3051 atgaatccct ttttcctttt ctaagcctag ataaggctgg acttctttt
3101 tttttttttt ttgagtctca ctctgtcacc caggctggag tgcagtagtt
3151 cgatcttggc tcactgcaac ctggctcaa gcaattctcc tgccttagcc
3201 tcctgagtag ctgggattac aggtgcccac caccatgccc ggctaatttt
3251 tattagcctc ccaaagtgct gggattacag gcgtgagcca ctgcgcctgg
3301 ccaaggctgg acttttatac aaaatagact aatacaggga aactaagaac
3351 acagcaggtta agcatgaata tcatacctgg tttcccaggt ttctttgtgg
3401 ccctgcaaatt gtggtaactt tttcagaatc cgccagttac accagctcct
3451 cccagaagcc tacttccagg cctctgcttc ccctggggc ttccctgtctg
3501 cgggatacta gctgttcaact cctgcagagc agtcaagagg ctcagaataag
3551 ttacctacac tccagcccta ctgagcttca tggcagcgtg gttcctggag
3601 gtggaaagccc agggacactc agttatccac ggccagggcc ttgagcatta
EXON 7
3651 acccctcctg ttccccctca gGGCTCCCAA TGTGGCTCAC GAGCTGAGTG
3701 GGGGCTGCCA TGGCTTCTCC CACAAATTCA TGCACTGGCA GGAGGAATTG

Fig. 1 (cont.)

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3751 CTGCTGGGAG GCATGGCCAG AGACCCCCAA GGAGAGCTGC TGA~~G~~gttaggg
 3801 tctcctctgg gagttggta ggggactctg ttcatgagaa cccatactgt
 3851 aatgccaggc agctctggca aaaggccctt cacatccctc accaggtgtt EXON 8
 3901 tgggccagct ctgacccctg gttctccac accccacca gGGCAGAGGC
 3951 CCTGCAGAGC ACCTTCTTGC TGATGAGTCC CCGCCAGCTG TACGAGCATT
 4001 TCCGGGGTGA CTATCAGACA CATGACATTG GCTGGAGTGA GGAGCAGGCC
 4051 AGCACAGTGC TACAAGCCTG GCAGCGGCCGC TTTGTGCAGG tcggtatgga
 4101 caaggacaag ggggggtgccc tgaggccatt ccctccctct gccccctcct EXON 9
 4151 atccacccctg tttctccagC TGGCCCAGGA GGCCCTGCCT GAGAACGCTT
 4201 CCCAGCAGAT CCATGCCTTC TCCTCCACCA CCCTGGATGA CATCCTGCAT
 4251 GCGTTCTCTG AAGTCAGTGC TGCCCGTGTG GTGGGAGGCT ATCTGCTCAT
 4301 Ggtgggtctt gcacctggca cttggccccc accccaccc tcaccagtgc EXON 10
 4351 ccacccctggg agcccccctgag actgcccctt ccccccacag CTGGCCTATG
 4401 CCTGTGTGAC CATGCTGCAG TGGGACTGCG CCCAGTCCTCA GGGTTCCGTG
 4451 GGCCTTGCCG GGGTACTGCT GGTGGCCCTG GCGGTGGCCT CAGGCCTTGG
 4501 GCTCTGTGCC CTGCTCGGCA TCACCTTCAA TGCTGCCACT ACCCAGgtac
 4551 gccaggactg cagggcagac tcagtgccag tcaccaggct tcacgggtcc EXON 11
 4601 tcagctgccc gctcctctgc ccctccagGT GCTGCCCTTC TTGGCTCTGG
 4651 GAATCGGGCGT GGATGACGTA TTCCTGCTGG CGCATGCCTT CACAGAGGCT
 4701 CTGCCTGGCA CCCCTCTCCA Ggtggggcct tggcccccag ggctcatctg
 4751 aggcagctca gcttaactggtaa gggccctc ttggttcaag tgacccttgg
 4801 gctgctaattg aacctcggtg cctttgtcc ccatctgtaa acaggggaaa
 4851 taatagtgtcgtgtc ggttattgtt tggatcagtgc aggttaactca
 4901 agttgaatgc tttagaacagc ccatcatacg tacatggtaac ccaataaaatg
 4951 ctagccactg tgttatgact gccccaccc tcaccccaaa gttcctgagc
 5001 ctcccccttca ctccactttg acacggccccc tcccttgtaa cctgaggggca EXON 12
 5051 ggtccccact ctgtcctggc agGAGCGCAT GGGCGAGTGT CTGCAGCGCA

Fig. 1 (cont.)

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5101 CGGGCACCAG TGTGACTC ACATCCATCA ACAACATGGC CGCCTTCCTC
 5151 ATGGCTGCC CCGTCCCCT CCCTGCGCTG CGAGCCTTCT CCCTACAGGC
 5201 GGCCATAGTG GTTGGCTGCA CCTTGTAGC CGTGATGCTT GTCTTCCCAG
 5251 CCATCCTCAG CCTGGACCTA CGGCGGCGCC ACTGCCAGCG CCTTGATGTG
 5301 CTCTGCTGCT TCTCCAGgt a ctgcgtgcgc cccagccct tcctcccgta
 5351 acccacgcca gcctgtcccc tcaccagcat ttcaaggcac, agacctgtca
 EXON 13
 5401 tccactctct acctcttcca gTCCCTGCTC TGCTCAGGTG ATTCAAGATCC
 5451 TGCCCCAGGA GCTGGGGGAC GGGACAGTAC CAGTGGGCAT TGCCCACCTC
 5501 ACTGCCACAG TTCAAGCCTT TACCCACTGT GAAGCCAGCA GCCAGCATGT
 5551 GGTCACCATC CTGCCTCCCC AAGCCCACCT GGTGCCCCCCA CCTTCTGACC
 5601 CACTGGGCTC TGAGCTCTTC AGCCCTGGAG GGTCCACACG GGACCTTCTA
 5651 GCCCAGGAGG AGGAGACAAG GCAGAAGGCA GCCTGCAAGT CCCTGCCCTG
 5701 TGCCCCGTGG AATCTTGCCTT ATTCGCCCG CTATCAGTTT GCCCCGTTGC
 5751 TGCTCCAGTC ACATGCTAAG gtaagactgg gcagagcagg gcagagactt
 5801 agcatctctg ggcccagaag ggcagagagg gcttagtcca ctgcctgagg
 EX
 5851 ggctgggggc agccctgggg tctccagctt agttgctaca tcccgccagGC
 XON 14
 5901 CATCGTGCTG GTGCTCTTG GTGCTCTTCT GGGCCTGAGC CTCTACGGAG
 5951 CCACCTTGGT GCAAGACGGC CTGGCCCTGA CGGATGTGGT GCCTCGGGGC
 6001 ACCAAGGAGC ATGCCTTCCT GAGGCCAG CTCAGGTACT TCTCCCTGTA
 6051 CGAGGTGGCC CTGGTGACCC AGGGTGGCTT TGACTACGCC CACTCCAAAC
 6101 GCGCCCTCTT TGATCTGCAC CAGCGCTTCA GTTCCCTCAA GGCGGTGCTG
 6151 CCCCCACCGG CCACCCAGGC ACCCCGCACC TGGCTGCACT ATTACCGCAA
 6201 CTGGCTACAG Ggtgagaggc gagggagacgg gcagggaggg gtgctgcagg
 6251 gagaaacgcc ctggggccac cagctaatacg aaccctatcc tggctccccc
 EXON 15
 6301 cagGAATCCA GGCTGCCTT GACCAGGACT GGGCTTCTGG GCGCATCACC
 6351 CGCCACTCGA CCGCAATGGC TCTGAGGATG GGGCCCTGGC CTACAAGCTG
 6401 CTCATCCAGA CTGGAGACGC CCAGGAGCTT CTGGATTCTA GCCAGgttgg

Fig. I (cont.)

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6451 gagagggctg gaggggtcca ctatcacagg ggctgcaggc ~~ctcctgggcc~~
EXON 16
6501 caggccttca gcctctctgt cctctgcagc TGACCACAAG GAAGCTGGTG
6551 GACAGAGAGG GACTGATTCC ACCCGAGCTC TTCTACATGG GGCTGACCGT
6601 GTGGGTGAGC AGTGACCCCC TGGGTCTGGC AGCCTCACAG GCCAACTTCT
6651 ACCCCCCACC TCCTGAATGG CTGCACGACA AATACGACAC CACGGGGAG
6701 AACTTTCGCA gtgagtcctg gggggagctc ggcaagagcc ~~tcagcctcgc~~
6751 ccacacaaggc cctgagcctg aggcctgcc cactctgccc cgtgctcacc
EXON 17
6801 gcctgtccc tctccctctt ctcccttccc ctccctcca cagTCCCGCC
6851 AGCTCAGCCC TTGGAGTTTG CCCAGTTCCC TTTCTGCTG CGTGGCCTCC
6901 AGAAGACTGC AGACTTTGTG GAGGCCATCG AGGGGGCCCG GGCAGCATGC
6951 GCAGAGGCCG GCCAGGCTGG GGTGCACGCC TACCCCAAGCG GCTCCCCCTT
7001 CCTCTTCTGG GAACAGTATC TGGGCCTGCG GCGCTGCTTC CTGCTGGCCG
7051 TCTGCATCCT GCTGGTGTGC ACTTTCTCG TCTGTGCTCT GCTGCTCCTC
7101 AACCCCTGGA CGGCTGGCCT CATAgtgagt gcttgcagga gtggggacag
7151 agacacccca cccttccctg cccagcctgt catccctcct gccaggagcc
EXON 18
7201 ctctgtgago cctgtctccc tcagGTGCTG GTCCTGGCGA TGATGACAGT
7251 GGAACTCTTT GGTATCATGG GTTCTCTGGG CATCAAGCTG AGTGCATCC
7301 CCGTGGTGAT CCTTGTGGCC TCTGTAGGCA TTGGCGTTGA GTTCACAGTC
7351 CACGTGGCTC TGGGCTTCCT GACCACCCAG GGCAGCCGGA ACCTGCAGGC
7401 CGCCCATGCC CTTGAGCACA CATTGCCCC CGTGACCGAT GGGGCCATCT
7451 CCACATTGCT GGGTCTGCTC ATGCTTGCTG GTTCCCACCT TGACTTCATT
7501 GTAAG.....
7551 gtagggaggg ctcggggcag ggaggcaggg ctcaggacag
EXON 20
7601 gcctgggctg actcccccca caccctaccc ctagGTACTT CTTTGCAGGC
7651 CTGACAGTGC TCACGCTCCT GGGCCTCCTC CATGGACTCG TGCTGCTGCC
7701 TGTGCTGCTG TCCATCCTGG GCCCCGGGCC AGAGgtgacc acaccctcgg
7751 caccatccct ctactccctg cccaaaggac ggggttagggg gaggcaagg

Fig. 1 (cont.)

TOP SECRET//NOFORN

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7801 aaggacaga gccctgtggc ccacagacag gtacctcccc aacaggtgcc
7851 accagctgaa ggtggcagcc tcctccttcc cccagacacc atgttcctgc
7901 ccctcagccc tcctggcttc ttcatggac ccaccttaga cttttaggat
7951 ccagaacaag gtgcagggtt tgccccaggc ctcaacatcc tgtgcctgc
8001 cagctctcat atcctgctgg agaccaacaa gggccccagc ttcccaacag
8051 tcatggtaat ccccagcgag atgctaaagg ggacgggagc cccagggggcc
EXON 21
8101 cgtgggctta ctggggctgg tgtctccca cagGTGATAC AGATGTACAA
8151 GGAAAGCCA GAGATCCTGA GTCCACCCAGC TCCACAGGGA GGCGGGCTTA
8201 Ggtggggggc atcctcctcc ctgccccaga gctttgcag agtgaactacc
8251 tccatgaccg tggccatcca cccacccccc ctgcctgttg cctacatcca
8301 tccagccct gatgagcccc cttggtcccc tgctgtcact agctctggca
8351 acctcagttc caggggacca ggtccagcca ctgggtgaaa gagcagctga
8401 agcacagaga ccatgtgtgg ggcgtgtgg gtcactggga agcactgggt
8451 ctggtgttag acgcaggatg gacccttggg gggctctgt gctgctgcatt
8501 cccctctccc gacccagctg tcatggccct ccctgatatac catacagaac
8551 agccaccgat ttgcacatcc aggcctgtgt gagectgtat ctgtgtcact
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8701 gcacccttcc gtctggtgac tcctggcag gctctccata tccctgcccc
8751 cctcctacca catccattat ttatatgaaa atgtctatcc ttgttagtata
8801 catacatgtt agctatgtat aaagttttat ttttaaaga atgaaatata
8851 ttctatgtga agctatgtat aaagttttat ttttaaaga atgaaatata
8901 ttctatgtga actaatctcg aaagttttat ttttaaaga atgaaatata
8951 ttctatgtgt gcaagtgaac attagcttca gttgttttt tttggacaga
9001 gtggggagtt tgcaagtgaa cattagctat tggaaggagc ttctctggtg
9051 ccaggacctg aggtattage ttctctagtt ctgggtggaa aagacccca
9101 attctggatt ttgtcatat acttgtaac atcatcttggg ttaagtgcct

Fig. 1 (cont.)

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9151 actatacacaaa acgataacaa attttgttgg ttgtaaaatcc tactgggttc
9201 aatctggaga ccgagagcag aaaaaaaaaga accccactgt gtggcttc
9251 gagccaccat attccagcct gcccgtctct ccagactcac ctccacacctac
9301 ctgcttcacc cgacacggaa acggcaaggc agaggggcaa agccatgcag
9351 caggtggaag gcgaggtgga ggcagatcag gaaagcagcc agttgaagca
9401 gagagaggtc aacagggtct ggggagcttc tcaggaggtt tttggaccca
9451 gggaaaggag ccaggttcca gagcaacctc caaggcaaag gcctctgtaa
9501 gttggttgtc ctgacagccg agaggtgtct ttggccatgc agccagtgg
9551 tcagttgcgg gaactgctca gaaactgagg tgcttagcagt tagtggaggac
9601 acagcgtaag ttgtttgttc tttgtaaaatggtaa gaaacagctcc actaaggcaga
9651 ggccttgaag agtggccaca gcccgttggaaat agagcacaaaaa gcccaccc
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9751 catagtcttag ttcacataga ccctgggttc caaccaccca ctcaccaggaa
9801 atgatcccac cccaggaaca atgcgttctc acatcccacc ccacctggac
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9901 aacaacaaaa aacgcctatt gcaattgaat ccacgctaaa atgcctaaaa
9951 agctcaagag aagcggttag ttggcagaga accttagagta gggggtgcaa
10001 ccagcaggcc caagggaggg aggctgcatt tgggtccagc agtgtttggg
10051 tcaccaagaa gggccttcta ggtggagcag agagagctca ccaggccaga
10101 atagtgcaaa gggggtcagc cctcagtgcc acttaccagc ggagtaaccc
10151 tgggcaagtt agccagcctc actaaggctc cccatcttca tctttccagG
XON 22
10201 CCCGAGGAGA TC**TAG**CCTCT GCCTCCCACC CCAGCACCCCC CTCATCAGAC
10251 ACAAGGAGCG CCACTGTCTG GACAGGCTGA ATTGGTCTTC GGGTCCCTAA
10301 TTTCTCATAAC GCCATTCCCT CTGCCTAGAA CACTTTCTCA CCTCCCTTG
10351 ATGTGACCCCC ATATCACCCCT TCGAGGTGAA TTGGATCGGA TGCCATCTCC
10401 TCCAGGAGGG GTGGGGTCGT GCCTCCTGTG AGGTCCAGT GCCCCTGAGT
10451 GTCTGTGCC CCGTCTTCC CCGTCCCTCT CTCTAAGCCCC GGAGGCTTAC

Fig. 1 (cont.)

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10501 TGCAGGTAAG GACGGCGGGA CAGGACCTTA ACCGCTGGGA CGAACACCCAG
10551 CTCCGCAAAG GACTCCGCAC CCGGCGCCGC CCACGGGGTG CGGGTCCCAG
10601 GAGGACCAGC AGAGAGGAGC ATAGGAGAGC AAAGGAGATC AGTGACCCAT
10651 GGCTTCCCCG GTGGCGCGGA ACAGCCCGGA GCCGCCTGTG ATTTGCATAAC
10701 CCATGGTGCA CCACGAAAAG ATACCCCTCAA GATGCTTGCA CTCCCTCTGT
10751 GCGCGCATTT CTGCACTGTT TTAGAGCATG ATGCCTCTTA CACGCATCTG
10801 TGTGCATAAA CTACATATAG GGAGTGGCGTA CCACGCAGGC ATCCAACAAAC
10851 CATAAGTGTG TTAAGTGTGA GTTCTCCCTG CGAGGTTCGA AGCGGAAGTC
10901 ACGAATATAC TCGGGTTTCT CTTCAAAGCG CATAAAATCTT TCGCCTTTTA
10951 CTAAAGATTT CCGTGGAGAG AAAGTTGTGA GTTTTTATTC AATTTTTTGA
11001 GGCTCTTAT TTCTGAGGC TACATTTTA AGTATTAAAAA GTTAGGCAAC
11051 TACAAAAAAA AAAAAAAA

Fig. 1 (cont.)

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1 MTRSPPLRELP 11
 1 MASAGNAAEQDGGGGSGCIGAPGRPAGGGRRRTGGLRRAAAPDRDYL 50
 12 .. PSYTPPPARTAAPQI ... LAGSLKAPLWLRAYFQGGLFSLGGGIQRHCG 56
 51 HRPSCDAA.FALEQISKGKATGRKAPLWLRAKFQRLLFKLGGYIQKNCG 99
 57 KVLFGLLAFGALALGLRMAIETNLEQLWVEVGSRVSQELHYTKEKLGE 106
 100 KFLVVGLLIFGAFAVGLKAANLETNVEELWVEVGGRVSRELYTRQKIGE 149
 107 EAAYTSQMLIQTARQEGENILTPEALGLHLQAALTASKVQVSLYGKSWDL 156
 150 EAMFNPOLMCIQTPKEEGANVLTTEALLQHLDLQASRVHVYMYNROWKL 199
 157 NKICYKSGVPLIENGMIERMIEKLFPCVILTPLCDFWEGAKLQGGSAYLP 206
 200 EHLCYKSGELITEGYMDQIEYLYPCLIITPLDCFWEAKLQSGTAYLL 249
 207 GRPDIQWTNLDPEQLLEELGPFA . SLEGFRELLDKAQVGQAYVGRPCLHP 255
 250 GKPPPLRWTNFDPLEFLEELKKINYQVDSWEEMLNKAEVGHGYMDRPCLNP 299
 256 DDLHCPPSAPNHHSRQAPNVAHELGGCHGFSHKFMHWQEELLGGMARD 305
 300 ADPDCPATAPNKNSTKPLDMALVLNGGCHGLSRKYMHWQEELIVGGTVKN 349
 306 PQGELLRAEALQSTFLLMSPRQLYEHFRGDYQTHDIGWSEEQASTVLQAW 355
 350 STGKLVSAAHALQTMFQLMTPKQMYEHFKGYEYVSHINWNEDKAAILEAW 399
 356 QRRFVQLAQEALPENASQOIHAFSSSTLDDILHAFSEVSAARVVGGYLLM 405
 400 QRTYVEVVHQSVAQNSTQKVLSTTTLDDILKSFSDVSVIKVASGYLLM 449
 406 LAYACVTMLRWDCQAQSQGSVGLAGVLLVALAVASGLGLCALLGITFNAAT 455
 450 LAYACLTMLRWDCSKSQGAVGLAGVLLVALSVAAGLGLCSLIGISFNAAT 499
 456 TQVLPFLALGIGVDDVFLLAHAFTEALPG . TPLOERMGECLQRTGTSVV 503
 500 TQVLPFLALGVGVDDVFLLAHAFSETGQNKRIPFEDRTGECLKRTGASVA 549
 504 LTSINNMAAFLMAALVPIPALRAFLQAAIVVGCTFVAVMLVFPAILSLD 553
 550 LTSISNVTAFFMAALIPIPALRAFLQAAVVVFNFAMVLLIFPAILSMQ 599
 554 LRRRHQCQLDVLCCFSSPCSAQVIQILPQELGDGT VPVG 592
 600 LYRREDRRLDIFCCFTSPCVSRVIQVEPQAYTDTHDNTRYSPPPPYSSH 649
 593 IAH.....LTATVQAFTHCEASSQHVVTILPPQAH.....VPPPSDPLGS 633
 650 FAHETQITMQSTVQLRTEYDPHTHVYYTTAEPRSEISVQPVTVTQDTLSC 699

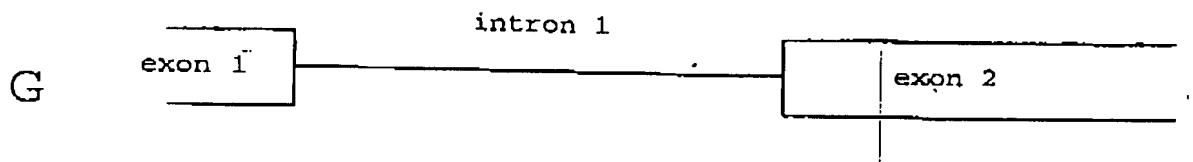
Fig. 2A

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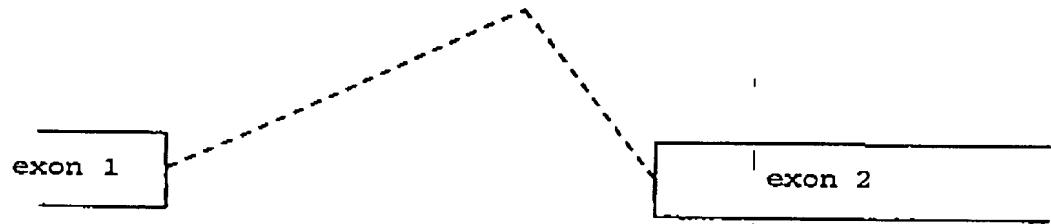
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Fig. 2C



Pro Gln
CCC CAG gt.....gt.....ag ATC CTA.....Cag GGC
← 67 bp → 755 bp → ← 51 bp →



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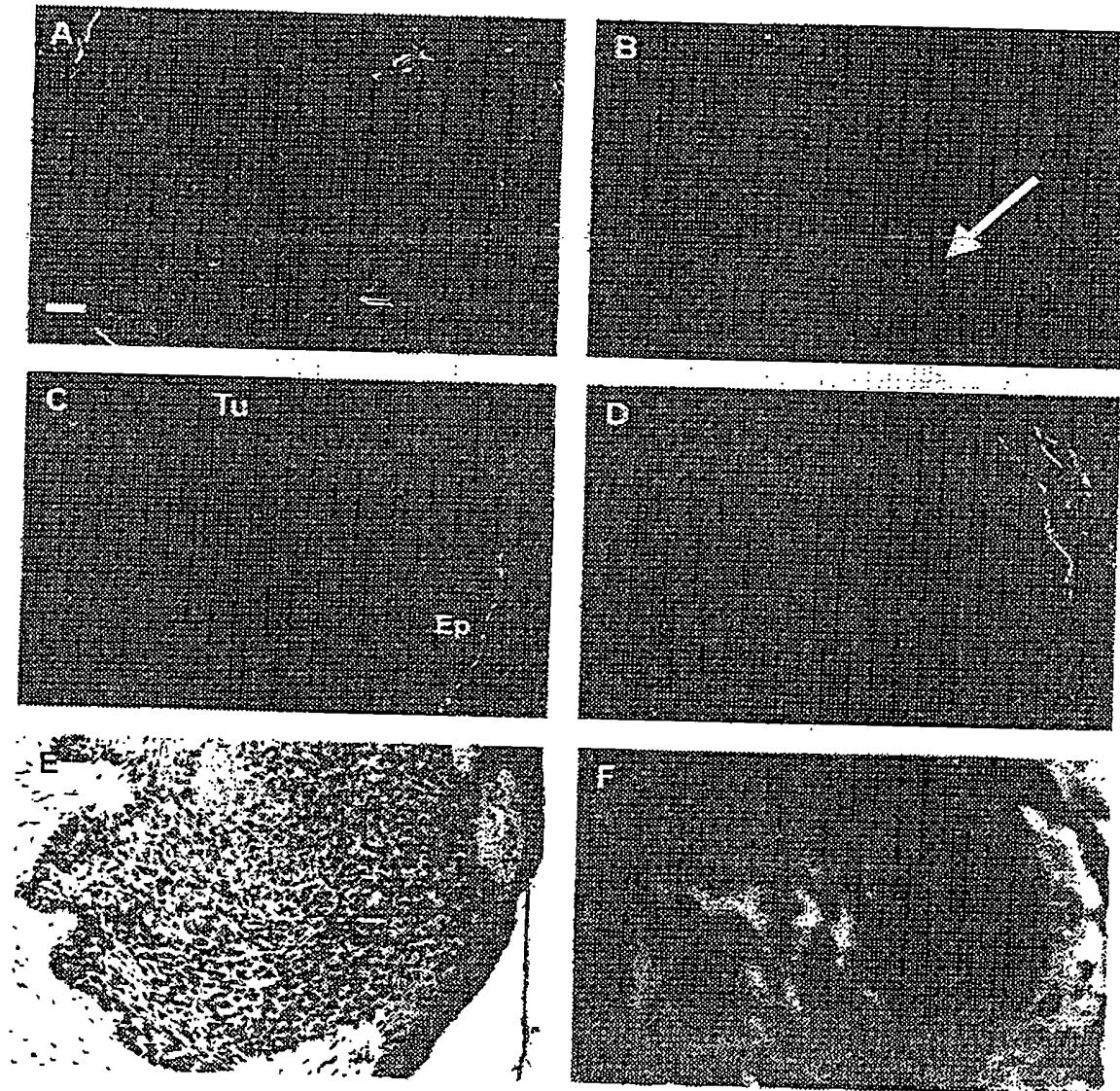


Fig. 3